



Swedish Civil
Contingencies
Agency

The MSB's work related to natural disasters





Foto: Hans Runesson

Swedish Civil Contingencies Agency (MSB)

The MSB is tasked with developing and supporting society's capacity to prevent and manage emergencies and disasters. We work along the entire threat and risk scale and possess information before, during and after an incident. Work is performed in close collaboration with other societal entities.

The MSB works to prevent and alleviate the effects of natural events such as landslides, forest fires, storms and floods, and helps society adapt to climate change. We also develop methods, techniques and tactics for managing natural disasters before, during and after occurrence. A natural disaster refers to natural events that entail negative consequences for life, property and the environment.

Read more about the agency at www.msb.se

International activities

The UN and EU

At the World Conference on Disaster Reduction in Kobe, Japan in 2005, delegations attended from 168 countries and adopted a ten-year plan – the Hyogo Framework for Action 2005–2015.

The plan aims to make the world more resilient to natural disasters by working to reduce the risks and limit the consequences. In order to improve collaboration and coordination, each country needs a national platform that focuses on natural disasters and involves all the relevant agencies. The MSB actively takes part in exchanging knowledge and experience on these issues in Europe.

Sweden is chairing the European Forum for Disaster Risk Reduction through the MSB. Collaboration is between various national platforms and points of contact for these issues in Europe.

The MSB also actively takes part by contributing expert assistance for flooding and forest fire issues.

The EU Community Mechanism was established for the assistance of EU member states in the event of major emergencies and disasters. The Community Mechanism stretches from prevention to emergency preparedness to emergency response. The MSB represents Sweden.

More than 50 humanitarian aid operations overseas – simultaneously

The MSB's resources for humanitarian operations are in demand by the EU, UN and others. At times, it might be a matter of quickly saving human lives after a disaster. There are 50-60 overseas operations going on simultaneously, primarily in Africa, Asia and Europe.

Within 10 hours of receiving a request for assistance, the MSB can send a search and rescue (SAR) team. The SAR team consists of up to 74 specifically trained members and 12 rescue dogs; the team is self sufficient for at least 10 days.

Disaster risk reduction work

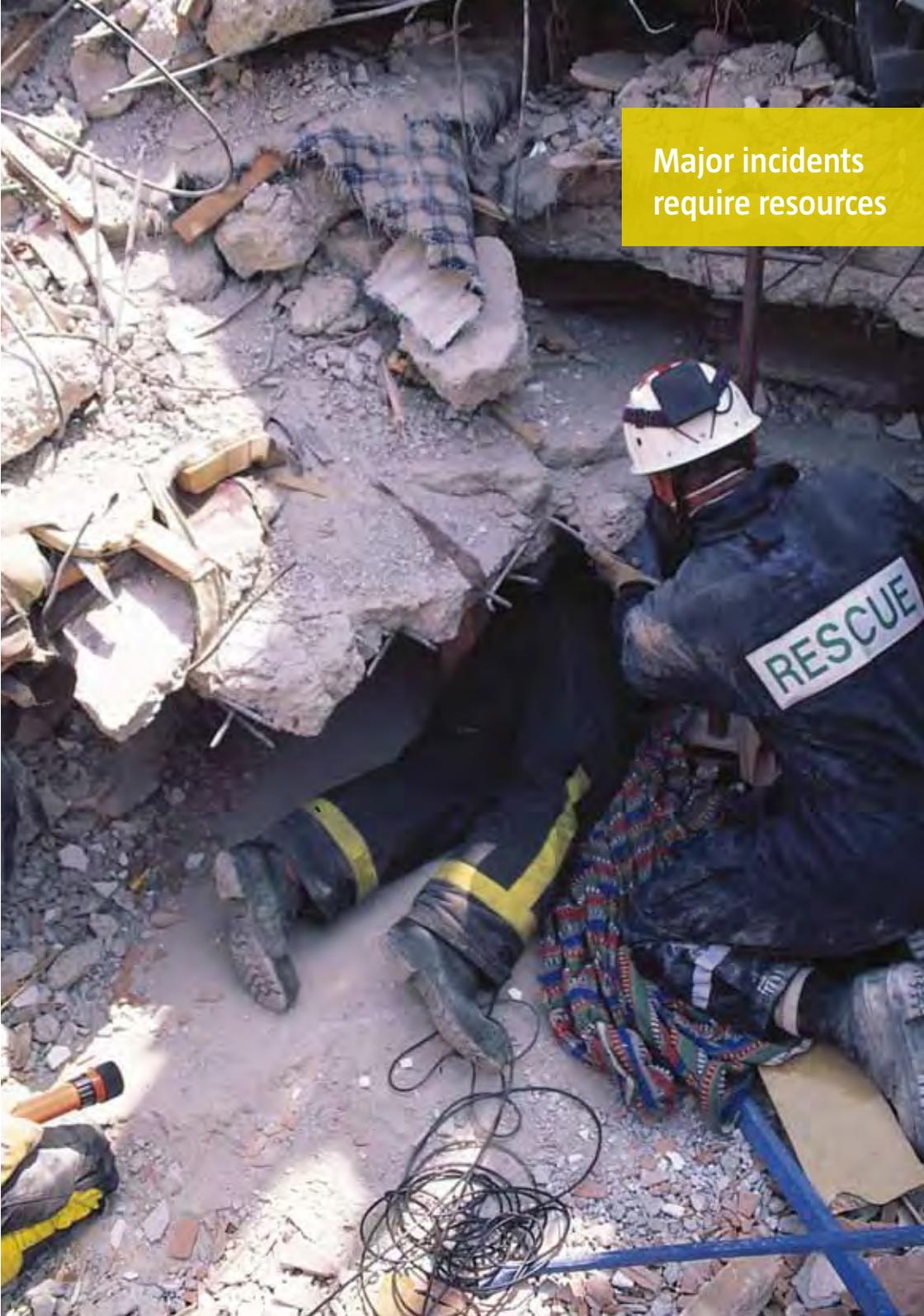
In addition to taking part in emergency response and disaster relief operations in other countries that need immediate assistance, the MSB is also responsible for supporting aid operations aimed at reducing the risk of natural disasters.

The MSB's operations in the field aim, for example, to reinforce disaster management capacity through emergency preparedness planning, risk and vulnerability analyses, developing policies and disaster management structures, developing strategies for managing disasters, strengthening SAR capacities and assisting with disaster waste management.

Disaster risk reduction work is performed in several ways – in part through long-term capacity-development projects aimed at strengthening national and local capacities to manage disasters and in part through early recovery where the focus is on reconstructing sustainable infrastructure and buildings to avoid future disasters.

Observation

In connection with major and particularly interesting emergencies the MSB dispatches observers, both domestically and overseas, to learn lessons from the prevention, preparation and operational work. Observer missions are documented and entered into RIB, which is the MSB's Integrated Decision Support System, used as the basis for decision-making during emergency response.



Major incidents
require resources



Our cooperation can prevent and mitigate the consequences of natural disasters

National activities

National platform for disaster risk reduction

In Sweden, 17 agencies and organisations have established a national platform for disaster risk reduction. The MSB was tasked by the government to serve as the focal point and to coordinate the Swedish platform.

The platform works to prevent and alleviate the effects of natural disasters in line with Sweden's commitments to the Hyogo Declaration and the Hyogo Framework for Action.

Landslides and floods

General stability and flood mapping

The MSB has been tasked by the government to assist municipalities and county administrative boards with their general stability and flood mapping, as a way of offering support to municipal risk identification and risk management work,

General stability mapping pertains to developed areas where conditions exist for soil movement. When mapping is complete, the aim is for municipalities to proceed by conducting detailed studies and possibly introducing preventive measures in the identified areas.

General flood mapping specifies areas along watercourses that are threatened by flooding when water flows reach specific levels, as well as the areas impacted by the 100-year flood and the estimated highest flow for each watercourse.

The digital model for watercourses can also be used during an ongoing flood. The model is calibrated based on current conditions, and new information about water levels is submitted to the relevant municipalities and county administrative boards.

Government grants for disaster prevention measures in existing developed areas

The government has earmarked SEK 43 million per year for preventive measures for existing developed areas, where the risk of natural disasters is particularly prevalent. Municipalities that have implemented or plan to implement preventive measures can apply for a grant to help them adapt to the effects of climate change.

Measures aimed at preventing flooding might include embankments, pumping devices and shut-off devices for the water and sanitation network.

Landslide prevention measures can include excavation, loading berms, erosion protection, drainage measures and soil reinforcements with lime cement columns.

In some cases, the only financially feasible method of preventing a disaster might be to remove the threatened object, for example by tearing down a building.

Information about government grants and the application form is available at www.msb.se.

Floods Directive

The MSB has the task of implementing the EU's Floods Directive in Sweden. The aim of the Floods Directive is to reduce the negative consequences of flooding on human health, the environment, cultural heritage and financial activities.

In conjunction with EU member states the MSB also takes part in efforts to implement the Directive within Europe.



Importance of long-term
and sustainable planning



**Bad
Värme**

Butik
Badrum
Värme
Installation
Service

**HÖGANÄS
KÄRLEKSTEN**

KAKEL
&
KLINKER

**B
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**HÖGANÄS
KÄRLEKSTEN**

The future can
be influenced

Reporting high flow rates

The MSB always monitors flow development around the country in the spring by obtaining relevant information from each county administrative board. The information is compiled and reported to the Ministry of Defence on a weekly basis. This enables information to be obtained at an early stage regarding flood combating materiel and other resources.

The MSB also monitors the development of high flows during other seasons.

River coordination groups

The MSB initiates the formation of local river groups. The groups are a forum for cooperation between and coordination of interested parties within a river's drainage basin. Cooperation offers an increased level of knowledge in terms of the parties' responsibility, function and capacity. County administrative boards convene the groups.

Forest fires and vegetation fires

The risk of forest and vegetation fires varies regionally in Sweden. Some parts of the country are hit harder by drought than others, while at the same time variation in vegetation causes fires to behave in different ways.

There is a forecast tool for forest fires on the MSB's website called "Fire risk – forest and land". The tool is used by the fire service and the county administrative boards to assess the risk of vegetation fires. The tool identifies the risk of grass and forest fires in Sweden. Two different fire risk models for forest fires are presented. One model shows the risk of ignition and the other shows the risk of spreading.

To enable forest and land fires to be detected at an early stage air patrols are used when there is a great risk of fire. Forest fire air patrols are administered by county administrative boards, which are financially remunerated by the MSB.

Extra resources

Municipalities are responsible for executing emergency response operations. In the event of a major incident where the municipality's resources are insufficient, cooperation should be sought within the region to resolve the situation. If materiel is insufficient even when regional cooperation has been sought, the government may provide extra resources via the MSB. Expertise within some areas is also available. Extra resources primarily exist to support municipalities in the event of flooding, forest fires or loss of electricity due to storms.

Support for the fire service

The MSB's Duty Officer serves as the contact channel into the MSB's organisation for support and materiel.

The Duty Officer can be reached round the clock on: +46 (0)54-150 150. The Duty Officer is knowledgeable about the MSB's resources and how they can be accessed. The Duty Officer also maintains contact with other agencies and ministries that may be affected by a state emergency response operation.

Remuneration for rescue service costs

A municipality that has incurred considerable costs as a result of a rescue service is entitled to remuneration from the state for the portion of the cost that exceeds the municipality's excess. The aim of remuneration is to protect the municipality from costs that may result from major and prolonged emergency response operations. Entitlement to remuneration is connected to the term a rescue service as defined in Chapter 1, Section 2 of the Civil Protection Act (2003:778).



Knowledge, innovation and training improve safety

Natural disaster database

In order to learn from previous incidents, the natural disaster database collates information about natural disasters in Sweden. It is run by the MSB, but is dependent upon other agencies' incident reports. The database offers municipalities and other agencies and organisations assistance and support during physical planning and planning for effective emergency response operations.

<http://ndb.msb.se>

Adapting to climate change

Climate adaptation measures will be required within most aspects of society. This might pertain, for example, to new guidelines being introduced or concrete measures being taken to protect existing and future buildings from new risks. The MSB collaborates with other agencies through a climate change adaptation portal. Municipalities and county administrative boards that work to adapt society to climate change can find information and support at www.klimatanpassning.se.

Research and development

Developing knowledge is an important aspect of the MSB's efforts to achieve a safer society. Research and development constitute the most important means of achieving knowledge development. Sharing the results in a manner that guarantees they reach the appropriate target groups is another important aspect.

The research and development funded by the MSB in the field of natural disasters is aimed, for example, at improved prevention measures and providing better support to the fire service and emergency management.



Collaboration

The MSB collaborates closely with domestic and international organisations in order to exchange experiences and enhance the management of natural and technical disasters. This includes, for example, participation in a number of delegations, networks, expert and collaboration groups.

The MSB also plays an important role in terms of helping societal entities coordinate resources, information to the public and status reports to the government.

Training and information

All societal entities have a responsibility in the event of emergencies and disasters, and must therefore have the requisite capacity to limit and manage the consequences of an incident. The MSB has the task of providing support and training to help the relevant entities achieve the necessary level of competence. For local fire brigade personnel basic and in-service training includes instruction on natural disasters.

The MSB offers training at its Revinge and Sandö colleges and via external instructors at other locations in the country. Information and training in the field of natural disasters are also offered to authorities and the private sector.

*Tjugofyra*⁷ is the name of the MSB's magazine that is available both in print and on the MSB's homepage. The publication monitors development within the agency's areas of responsibility.

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